an optical deflector for deflecting the light flux formed as the line image via a deflecting reflective plane thereof, which is located near where the line image is formed; and

a third optical lens system for condensing the deflected light flux as an optical beam spot on the surface to be scanned; wherein

the second optical lens system includes a glass lens and at least one plastic lens having a non-arc shape, wherein the at least one plastic lens has a negative power in the sub scanning direction, and

a variation in a radius of curvature of an imaging surface of the second optical lens system is opposite to that in a radius of curvature of an imaging surface of the third optical lens system in the sub-scanning direction in accordance with a change in temperature.

2. (Amended) A method of manufacturing an optical scanning apparatus, the method comprising the steps of:

providing a light source for emitting a light flux;

arranging a first optical lens system so as to couple the light flux emitted by the light source to a following optical lens system;

forming a second optical lens system to include a glass lens and at least one plastic lens having a non-arc shape and negative power in a sub scanning direction;

arranging the second optical lens system following the first optical lens system such that the second optical lens system forms the light flux from the first optical lens system into a line image extending in a direction corresponding to a

main scanning direction of the surface to be scanned which is perpendicular to the sub scanning direction;

arranging an optical deflector so as to deflect the light flux formed as the line image via a deflecting reflective plane thereof, which is located near where the line image is formed; and

arranging a third optical lens system so as to condense the deflected light flux as an optical beam spot on the surface to be scanned, and wherein

a variation in a radius of curvature of an imaging surface of the second optical lens system is opposite to that in a radius of curvature of an imaging surface of the third optical lens system in the sub-scanning direction in accordance with a change in temperature.

3. (Amended) An optical scanning apparatus for optically scanning a surface to be scanned at a constant velocity, the optical scanning apparatus comprising:

means for emitting a light flux;

means for coupling the light flux emitted by said means for emitting a light flux to a means for forming the light flux into a line image;

means for forming the light flux received from the means for coupling the light flux into a line image extending in a direction corresponding to a main scanning direction of the surface to be scanned which is perpendicular to a sub scanning direction;

means for deflecting the light flux formed as the line image via a deflecting reflective plane thereof, which is located near where the line image is formed; and

means for condensing the deflected light flux as an optical beam spot on the surface to be scanned; wherein

the means for forming the light flux into the line image includes a glass lens and at least one plastic lens having a non-arc shape and negative power in the sub scanning direction, and wherein

a variation in a radius of curvature of an imaging surface of the second optical lens system is opposite to that in a radius of curvature of an imaging surface of the third optical lens system in the sub-scanning direction in accordance with a change in temperature.

4. (Amended) An image forming apparatus for forming an image by optically scanning a surface to be scanned at a constant velocity, the image forming apparatus comprising:

means for emitting a light flux;

means for coupling the light flux emitted by said means for emitting a light flux to a means for forming the light flux into a line image;

means for forming the light flux received from the means for coupling the light flux into a line image extending in a direction corresponding to a main scanning direction of the surface to be scanned which is perpendicular to a sub scanning direction;

means for deflecting the light flux formed as the line image via a deflecting reflective plane thereof, which is located near where the line image is formed; and means for condensing the deflected light flux as an optical beam spot on the surface to be scanned; wherein

the means for forming the light flux into the line image includes a glass lens and at least one plastic lens having a non-arc shape and negative power in the sub scanning direction, and wherein

a variation in a radius of curvature of an imaging surface of the second optical lens system is opposite to that in a radius of curvature of an imaging surface of the third optical lens system in the sub-scanning direction in accordance with a change in temperature.

REMARKS

Applicant respectfully requests reconsideration of the above-identified Patent Application in light of the Amendment and Remarks.

The Examiner has rejected claims 1-4 under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent 5,737,312, issued April 7, 1998 to Iizuka. The Examiner alleges that Iizuka discloses an image forming apparatus which comprises a light source (13), a first optical lens system (14); a second lens optical system (17), an optical deflector (12); and a third optical lens system (220). The Examiner's attention is drawn to Fig. 1 of the '312 patent, which discloses that the second optical lens system (17) and the third optical lens system (220) have the same radius of curvature.

Applicant respectfully disagrees with the Examiner. Applicant has amended claims 1-4 make clear that the curvature of an imaging surface of the second optical lens system is opposite to that of the third optical lens system in the sub-scanning direction in accordance with a change in temperature. Support for this amendment may be found in the specification on pages 14-15.

The claims as amended which claim a second optical lens system (14) and a third optical lens system (18) that have opposite curvatures, distinguish the present invention from that of Iizuka. (Compare Figure 1 of Iizuka with instant Figure 1). In